

LEANDRO FRANCISCO PIPPA, B.PHARM., M.SC., PH.D.

August 2025

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📍 Orlando, FL, USA

🌐 www.linkedin.com/in/pippalf

- Population PK/PD (*NONMEM, R nlmixr2, Monolix, Pumas*)
- PBPK modeling and simulation (*Simcyp*)
- Statistical analysis and data visualization (*R*)
- Scientific writing
- Bioanalytical methods (*UHPLC-MS/MS*)
- 11+ years of experience in clinical research, pharmacokinetics
- Strong communicator, collaborative team player, and adaptable scientist with experience in interdisciplinary research for drug development

EDUCATION

[Hyperlinks included](#)

Postdoctoral Training #2, Pharmacometrics

Dec. 2023 – current

Certara, Pharmacometrics, USA & University of Florida, College of Pharmacy, Department of Pharmaceutics, Center for Pharmacometrics and Systems Pharmacology, Orlando, Florida, USA ([industry-academia joint position](#))

Semi-mechanistic PK/PD CAR T cellular kinetics modeling (Certara Supervisors: Mirjam N. Trame, Ph.D. & Stephen B. Duffull, Ph.D. | University of Florida Supervisors: Stephan Schmidt, Ph.D. & Natalia Valadares de Moraes, Ph.D.)

Postdoctoral Training #1, Pharmacometrics

Apr. 2022 – Dec. 2023

University of Florida, College of Pharmacy, Department of Pharmaceutics, Center for Pharmacometrics and Systems Pharmacology, Orlando, Florida, USA

PBPK/PD modeling in obese and gastric bypass populations (Supervisor: Natalia Valadares de Moraes, Ph.D.)

Doctor of Philosophy, Toxicology

Dec. 2016 – Feb. 2022

University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Ribeirão Preto, São Paulo, Brazil

Doctoral Dissertation: "Effect of chronic hepatitis C on the activity of the main CYP isoforms and BCRP, OATP1B1, OCT and P-gp transporters in patients with different stages of hepatic fibrosis" (Advisor: Vera Lucia Lanchote, Ph.D.) ([AWARDS & RECOGNITION, #1](#))

Master of Science, Toxicology

Feb. 2014 – Aug. 2016

University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Ribeirão Preto, São Paulo, Brazil

Master's Thesis: "Pharmacokinetics, metabolism, and urinary excretion of doxorubicin in breast cancer patients" (Advisor: Vera Lucia Lanchote, Ph.D.)

Bachelor of Science, Pharmacy-Biochemistry

Feb. 2007 – Dec. 2013

University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Ribeirão Preto, São Paulo, Brazil

WORK & RESEARCH EXPERIENCE

[Hyperlinks included](#)

Semi-mechanistic CAR T cellular kinetics modeling

Dec. 2023 – current

Certara, Pharmacometrics, USA & University of Florida, College of Pharmacy, Department of Pharmaceutics, Center for Pharmacometrics and Systems Pharmacology, Orlando, Florida, USA ([industry-academia joint position, Postdoctoral Associate](#))

- Conducting research and supporting client projects in drug development, with a focus on CAR T-cell therapies
- Developing semi-mechanistic population PK/PD models to characterize CAR T-cell kinetics and optimize lymphodepletion regimens (FDA Project Optimus)
- Performing exposure-response analyses to evaluate drug efficacy and safety relationships

PBPK/PD modeling in obese and gastric bypass populations

Apr. 2022 – Dec. 2023

University of Florida, College of Pharmacy, Department of Pharmaceutics, Center for Pharmacometrics and Systems Pharmacology, Orlando, Florida, USA (Postdoctoral Associate)

- Developed PBPK models for special populations (obese and Roux-en-Y gastric bypass)
- Performed clinical data analysis
- Mentored students in the use of R and the development of population PK/PD models

Effect of chronic hepatitis C on the activity of CYP isoforms and drug transporters in patients with different stages of hepatic fibrosis using a probe drug cocktail

Dec. 2016 – Feb. 2022

University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Laboratory of Clinical Pharmacokinetics, Ribeirão Preto, São Paulo, Brazil (Doctoral Researcher)

- Conducted clinical research: recruited patients, collected biological samples, developed and validated UHPLC-MS/MS methods for drug and metabolite quantification in plasma, and performed pharmacokinetic analyses
- Quantified the inhibition of various CYP enzymes and membrane transporters of PK interest caused by chronic hepatitis C and inflammation using a probe drug cocktail

Pharmacokinetics, metabolism, and urinary excretion of doxorubicin in breast cancer Brazilian patients <i>University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Laboratory of Clinical Pharmacokinetics, Ribeirão Preto, São Paulo, Brazil (Master's Researcher)</i> - Conducted clinical research: recruited patients, collected biological samples, developed and validated UHPLC-MS/MS methods for drug and metabolite quantification in plasma (including unbound fraction) and urine, and performed pharmacokinetic analyses - Characterized the pharmacokinetics of doxorubicin and its metabolite doxorubicinol in breast cancer patients, including estimation of its hepatic extraction ratio in humans	Feb. 2014 – Aug. 2016
Therapeutic drug monitoring of antiepileptic drugs in plasma and brain tissue <i>University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Laboratory of Toxicological Analyses, Ribeirão Preto, São Paulo, Brazil (Undergraduate Researcher)</i> - Developed, validated, and applied HPLC-UV methods for the analysis of several antiepileptic drugs - Applied the developed methods and performed pharmacokinetics analysis to support research projects and provide therapeutic drug monitoring of antiepileptic drugs to the university hospital	Feb. 2013 – Dec. 2013
Cloning of mutated versions of the BhC4-1 gene enhancer into the pHISi-1 yeast transformation vector <i>University of São Paulo, School of Pharmaceutical Sciences of Ribeirão Preto, Laboratory of Gene Expression Analyses, Ribeirão Preto, São Paulo, Brazil (Undergraduate Researcher)</i> - Was trained in molecular biology assays to clone mutated versions of the BhC4-1 gene ring gland enhancer of <i>Bradysia hygida</i> into the pHISi-1 yeast transformation vector clone - Supported molecular characterization of the interaction between trans-activating factors and cis-regulatory elements identified in the promoter of the DNA puff gene BhC4-1	Sep. 2010 – Jul. 2011

TRAININGS & WORKSHOPS, SELECTED

[Hyperlinks included](#)

- QSP and PK/PD Modeling with SimBiology — 11 h, Center for Pharmacometrics and Systems Pharmacology, University of Florida, Orlando, FL, USA, March 2025
- NLME Modeling Workflows Using Pumas: Hands-on-Workshop — three days, Center for Pharmacometrics and Systems Pharmacology, University of Florida, Orlando, FL, USA, March 2025
- Finch Studio Workshop — one day, Center for Pharmacometrics and Systems Pharmacology, University of Florida, Orlando, FL, USA, May 2023
- Julia & Pumas Workshop — two days, Center for Pharmacometrics and Systems Pharmacology, University of Florida, Orlando, FL, USA, Sep. 2022
- Hands-on Experience with Automated Model-based Drug Development: Incorporating population variability into mechanistic prediction of PK and modelling PK-PD (Certara Simcyp Full Workshop) — two weeks, online, May 2022
- 2022 Lixoft Pharmacometrics Spring School (MonolixSuite) — one week, online, Mar. 2022
- A Beginner Level Workshop on the Principles of Population Pharmacokinetics and Fundamentals of NONMEM® Software for Students, Trainees, and Early Career Professionals — two days, online, 2021 ACCP (American College of Clinical Pharmacology) Annual Meeting, Sep. 2021
- Getting and Cleaning Data (Part 3 of the Data Science Specialization program) — 19 h, online, Johns Hopkins Bloomberg School of Public Health (Coursera Verified Certificate completed with distinction), December 2014
- Exploratory Data Analysis (Part 4 of the Data Science Specialization program) — 54 h, online, Johns Hopkins Bloomberg School of Public Health (Coursera Verified Certificate, completed with distinction), November 2014
- R Programming (Part 2 of the Data Science Specialization program) — 57 h, online, Johns Hopkins Bloomberg School of Public Health (Coursera Verified Certificate, completed with distinction), August 2014
- The Data Scientist's Toolbox (Part 1 of the Data Science Specialization program) — 17 h, online, Johns Hopkins Bloomberg School of Public Health (Coursera Verified Certificate, completed with distinction), July 2014
- Applying PBPK Modeling & Simulation (GastroPlus) — 2 h, II Congress of the Brazilian Association of Pharmaceutical Sciences, Armação dos Búzios, Rio de Janeiro, Brazil, Sep. 2014
- Simcyp Tutorial — 2 h, II Congress of the Brazilian Association of Pharmaceutical Sciences, Armação dos Búzios, Rio de Janeiro, Brazil, Sep. 2014

AWARDS & RECOGNITION

- Ph.D. Final Dissertation chosen by the Graduate Program in Toxicology, School of Pharmaceutical Sciences of Ribeirão Preto, University of São Paulo, to represent the Graduate Program to compete for the Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES, *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) Award of Best Dissertation 2023
- Abstract ranked amongst the top 16 Student & Trainee Abstracts submitted for the 2023 ACCP (American College of Clinical Pharmacology) Annual Meeting, Bellevue, WA, USA
- Recognized by the Graduate Program in Toxicology, School of Pharmaceutical Sciences of Ribeirão Preto, University of São Paulo, as a Distinguished Alumnus for the 2025 Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES, *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) report, highlighting career achievements and contributions to the field

PEER-REVIEWED PUBLICATIONS

[Hyperlinks included](#)

1. Soliman A, Rodriguez-Vera L, Alarcia-Lacalle A, **Pippa LF**, Subhani S, Lukacova V, Duconge J, de Moraes NV, Vozmediano V. Leveraging Omeprazole PBPK/PD Modeling to Inform Drug-Drug Interactions and Specific Recommendations for Pediatric Labeling. *Pharmaceutics*. 2025 Mar 14;17(3):373. DOI: 10.3390/pharmaceutics17030373. PMID: 40143036
2. Soliman A, **Pippa LF**, Lass J, Leroux S, Vozmediano V, de Moraes NV. Model-Informed Dose Optimization of Spironolactone in Neonates and Infants. *Pharmaceutics (Basel)*. 2025 Mar 1;18(3):355. DOI: 10.3390/ph18030355. PMID: 40143132
3. Ribeiro GSG, **Pippa LF**, Moreira FL, De Moraes NV. Physiologically-based pharmacokinetic modeling of enantioselective hydroxychloroquine kinetics and impact of genetic polymorphisms. *Braz. J. Pharm. Sci.* 2025 Jan 20;61: e24302. DOI: 10.1590/s2175-97902025e24302
4. Happ MSR, **Pippa LF**, Lauretti GR, Gebhart AR, Weindl G, Azeredo FJ, Vozmediano V, Schmidt S, de Moraes NV. Unravelling sources of variability on rocuronium pharmacokinetics: Implications for prolonged recovery in older patients. *Br J Clin Pharmacol*. 2025 Jul;91(6):1692-1704. DOI: 10.1111/bcp.16386. PMID: 39783783
5. **Pippa LF**, Vozmediano V, Mitrov-Winkelmolen L, Touw D, Soliman A, Cristofolletti R, Salgado Junior W, de Moraes NV. Impact of obesity and roux-en-Y gastric bypass on the pharmacokinetics of (R)- and (S)-omeprazole and intragastric pH. *CPT Pharmacometrics Syst Pharmacol*. 2024 Sep;13(9):1528-1541. DOI: 10.1002/psp4.13189. PMID: 38923321
6. **Pippa LF**, Vieira CP, Caris JA, Rocha A, Marques MP, Garcia CP, Rezende REF, Lanchote VL. Effect of Chronic Hepatitis C on the Activity of the Membrane Transporters P-gp and OATP1B1/BCRP on Patients With Different Stages of Hepatic Fibrosis. *Clin Pharmacol Ther*. 2023 Jul;114(1):173-181. DOI: 10.1002/cpt.2908. PMID: 37070971
7. Machado MC, Yamamoto PA, **Pippa LF**, de Moraes NV, Neves FMF, Portela RD, Barrouin-Melo SM, Hielm-Björkman A, Godoy ALPC, Estrela-Lima A. Pharmacokinetics of Carboplatin in Combination with Low-Dose Cyclophosphamide in Female Dogs with Mammary Carcinoma. *Animals (Basel)*. 2022 Nov 10;12(22):3109. DOI: 10.3390/ani12223109. PMID: 36428336
8. **Pippa LF**, Marques MP, da Silva ACT, Vilar FC, de Haes TM, da Fonseca BAL, Martinez R, Coelho EB, Wichert-Ana L, Lanchote VL. Sensitive LC-MS/MS Methods for Amphotericin B Analysis in Cerebrospinal Fluid, Plasma, Plasma Ultrafiltrate, and Urine: Application to Clinical Pharmacokinetics. *Front Chem*. 2021 Nov 29;9:782131. DOI: 10.3389/fchem.2021.782131. PMID: 34912784
9. **Pippa LF**, Vieira CP, Caris JA, Rocha A, Garcia CP, Rezende REF, Lanchote VL. Clinical treatment for hepatitis C reverses CYP2C19 inhibition. *Br J Clin Pharmacol*. 2021 Oct;87(10):4013-4019. DOI: 10.1111/bcp.14829. PMID: 33738827
10. Oliveira ML, Rocha A, Nardotto GHB, **Pippa LF**, Simões BP, Lanchote VL. Analysis of daunorubicin and its metabolite daunorubicinol in plasma and urine with application in the evaluation of total, renal and metabolic formation clearances in patients with acute myeloid leukemia. *J Pharm Biomed Anal*. 2020 Nov 30;191:113576. DOI: 10.1016/j.jpba.2020.113576. PMID: 32889347
11. Cestari RN, de Oliveira RDR, de Souza FFL, **Pippa LF**, Nardotto GHB, Rocha A, Donadi EA, Lanchote VL. Systemic Lupus Erythematosus Activity Affects the Sinusoidal Uptake Transporter OATP1B1 Evaluated by the Pharmacokinetics of Atorvastatin. *Clin Transl Sci*. 2020 Nov;13(6):1227-1235. DOI: 10.1111/cts.12808. PMID: 32463566
12. **Pippa LF**, Oliveira ML, Rocha A, de Andrade JM, Lanchote VL. Total, renal and hepatic clearances of doxorubicin and formation clearance of doxorubicinol in patients with breast cancer: Estimation of doxorubicin hepatic extraction ratio. *J Pharm Biomed Anal*. 2020 Jun 5;185:113231. DOI: 10.1016/j.jpba.2020.113231. PMID: 32163849

POSTERS & PRESENTATIONS

[Hyperlinks included](#)

1. **Leandro F Pippa**, Hunter Stephens H, Stephen B Duffull, Mirjam N Trame. A minimal model to support a CAR T-cell therapy development platform. Abstract accepted for poster presentation at the 2025 American Conference on Pharmacometrics (ACoP 2025), Aurora, CO, USA
2. Mehta HR, Zhou L, **Pippa LF**, Lanchote VL, de Moraes NV. Modeling the Impact of Hepatic Impairment on Drug Transporters: Rosuvastatin as a Probe for Organic Anion Transporting Polypeptide 1B1 and Breast Cancer Resistance Protein. Abstract accepted for poster presentation at the 2025 American College of Clinical Pharmacology (ACCP) Annual Meeting, Phoenix, AZ, USA
3. **Pippa L**, Yamamoto P, Soliman A, Cristofolletti R, Vozmediano V, De Moraes N. 2024. PBPK/PD of omeprazole and esomeprazole treatment in non-obese, obese, and post-gastric bypass patients. Poster (#8) presented at the 13th Annual Lake Nona Leadership Council Meeting (2024) of the Center for Pharmacometrics and Systems Pharmacology, College of Pharmacy, University of Florida, Orlando, FL, USA
4. **Pippa L**, Yamamoto P, Soliman A, Cristofolletti R, Vozmediano V, De Moraes N. 2024. PBPK/PD of omeprazole and esomeprazole treatment in non-obese, obese, and post-gastric bypass patients. Poster presented at the 37th Annual Research Showcase of the College of Pharmacy, University of Florida, Gainesville, FL, USA
5. **Leandro F Pippa**, Priscila A Yamamoto, Rodrigo Cristofolletti, Valvanera Vozmediano, Natalia V de Moraes. 2023. The down-regulation of CYP3A4 and CYP2C19 in obese patients is restored after gastric bypass: PBPK modeling for omeprazole as a probe drug. Poster (#PBPK765) presented at the 14th American Conference on Pharmacometrics (ACoP14), National Harbor, MD, USA
6. Miriam Happ, **Leandro F Pippa**, Gabriela Lauretti, Anthony Gebhart, Günther Weindl, Francine Azeredo, Valvanera Vozmediano, Stephan Schmidt, Natalia de Moraes. 2023. Mitigation of rocuronium induced residual neuromuscular blockade risk by means of a population PK/PD model. Poster (#PMX813) presented at the 14th American Conference on Pharmacometrics (ACoP14), National Harbor, MD, USA
7. **L Pippa**, P Yamamoto, R Cristofolletti, V Vozmediano Esteban, N De Moraes. 2023. Simulating (R)-omeprazole & (S)-omeprazole Pharmacokinetics in Obese & Post-bariatric Surgery Patients By Physiologically-based Pharmacokinetic Modeling. Poster (#087) presented at the 2023 American College of Clinical Pharmacology (ACCP) Annual Meeting, Bellevue, WA, USA ([AWARDS & RECOGNITION, #2](#))
8. **LF Pippa**, R Cristofolletti, V Vozmediano, NV de Moraes. 2023. Leveraging PBPK modeling to explore the effect of gastric bypass in omeprazole enantioselective pharmacokinetics. 2023. Poster presented at the 12th Annual Lake Nona Leadership Council Meeting (2023) of the Center for Pharmacometrics and Systems Pharmacology, College of Pharmacy, University of Florida, Orlando, FL, USA

9. **Pippa LF**, Vieira CP, Caris JA, Rocha A, Pereira, MPM, Garcia CP, Rezende REF, Lanchote VL. 2021. Suppression of CYP isoforms in patients with chronic hepatitis C before and after pharmacological treatment depends on the stage of hepatic fibrosis. Poster (#943) presented at The Liver Meeting American Association for the Study of Liver Diseases (AASLD) 2021, hybrid: online & San Diego, CA, USA
10. **Pippa LF**, Vieira CP, Caris JA, Rocha A, Garcia CP, Rezende REF, Lanchote VL. 2021. O tratamento farmacológico para hepatite C crônica reverte a inibição de CYP2C19 [The pharmacological treatment for chronic hepatitis C reverses the inhibition of CYP2C19]. Poster (#PO-1891) presented at Hepato2021 XXVI Congresso Brasileiro de Hepatologia [26th Brazilian Conference of Hepatology], online, Brazil
11. **Pippa LF**, Vieira CP, Caris JA, Rocha A, Pereira MM, Garcia CP, Rezende RE, Lanchote VL. 2021. Disease-drug interactions in hepatitis C: suppression of CYP3A and P-gp/OATP in patients with different stages of hepatic fibrosis. Poster (#120) presented at the 2021 American College of Clinical Pharmacology (ACCP) Annual Meeting, online, USA
12. **Pippa LF**, Vieira CP, Rocha A, Caris JA, Rezende REF, Lanchote VL. 2021. Hepatitis C virus infection treatment reverses CYP2C19 inhibition using omeprazole as a probe drug in patients with hepatic fibrosis. Poster (#PIV-040) presented at the American Society for Clinical Pharmacology and Therapeutics (ASCPT) 2021 Annual Meeting, online, USA
13. **Pippa LF**, Martinez R, Wichert-Ana L, Fonseca BAL, Marques MP, Lanchote VL. 2019. A highly sensitive LC-MS/MS assay for analysis of amphotericin B in plasma, urine and cerebrospinal fluid: application to pharmacokinetics in a patient with neurocryptococcosis. Poster presented at the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT) 2019, Foz do Iguaçu, PR, Brazil
14. M Locci de Oliveira, G Henrique Balthazar Nardotto, **L Francisco Pippa**, A Rocha, B Pinto Simões, VL Lanchote. 2018. Daunorubicin metabolism and urinary excretion in patients with acute myeloid leukemia. Poster (#P223) presented at the 84th Annual Meeting of the German Society for Experimental and Clinical Pharmacology and Toxicology (DGPT) and the 20th Annual Meeting of the Association of the Clinical Pharmacology Germany (VKIiPha), Göttingen, Germany
15. **Pippa LF**; Rocha A, Andrade JM, Lanchote, VL. 2017. Estimation of IN VIVO hepatic extraction ration of doxorubicin in breast cancer patients. Poster (#11.023) presented at the 49th Brazilian Congress of Pharmacology and Experimental Therapeutics, Ribeirão Preto, SP, Brazil
16. Marques MP, **Pippa LF**, Oliveira ML, Rocha A, Andrade JM, Lanchote VL, 2017. A highly sensitive LC-MS/MS assay for analysis of doxorubicin and doxorubicinol in urine and free fraction in plasma: applications to pharmacokinetics, metabolism and urinary excretion in breast cancer patients. Poster presented at the 11th International Congress of Pharmaceutical Sciences (CIFARP), Ribeirão Preto, SP, Brazil
17. Oliveira ML, **Pippa LF**, Rocha A, Simoes, BP, Lanchote VL. 2016. Quantification of daunorubicin and its metabolite daunorubicinol in human plasma by LC-MS/MS. Poster presented at the International Meeting of Environmental Health and Toxicology (IMEHTOX), Ribeirão Preto, SP, Brazil
18. Queiroz RH, Puga LT, Ferreira FI, **Pippa LF**. 2013. Desenvolvimento e validação de método analítico para quantificação de fármacos antiepilépticos em tecido cerebral de pacientes epiléticos [Development and validation of an analytical method for the quantification of antiepileptic drugs in brain tissue of epileptic patients]. Poster presented at the 21st International Symposium of Undergraduate Research at University of São Paulo, Ribeirão Preto, SP, Brazil
19. **Pippa LF**, Candido-Silva JA, Monesi N. 2011. Clonagem de versões mutadas do enhancer de glândula anelar do gene BhC4-1 no vetor de transformação de levedura pHISi-1 [Cloning of mutated versions of the BhC4-1 gene ring gland enhancer into the pHISi-1 yeast transformation vector]. Poster presented at the 19th International Symposium of Undergraduate Research at University of São Paulo, Ribeirão Preto, SP, Brazil

SOFTWARE SKILLS

- Population pharmacokinetics and pharmacodynamics (popPK/PD) modeling and simulation: NONMEM, R (*nlmixr2*), Monolix, Pumas
- Physiologically-based pharmacokinetic (PBPK) modeling and simulation: Certara Simcyp Simulator
- Pharmacokinetics (non-compartmental analysis, NCA; compartmental analysis, CA): Certara Phoenix WinNonLin, R (*NonCompart*, *PKNCA*)
- Scripting, statistical analysis, and data visualization: R (*tidyverse*)

ADDITIONAL INFORMATION

[Hyperlinks included](#)

Scientific & Professional Societies

- American College of Clinical Pharmacology (ACCP): member since 2021
- American Society for Clinical Pharmacology and Therapeutics (ASCPT): member since 2021
- International Society of Pharmacometrics (ISoP): member since 2023

Scientific Journal Reviewer

Reviewer for the European Journal of Pharmaceutical Sciences, Pharmaceutics

Languages

- Portuguese: native speaker
- English: fluent – Certificate of Proficiency in English (ECPE), 2006. The University of Michigan, English Language Institute, Ann Arbor, MI, USA
- Spanish: basic knowledge